

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
16 September 2004 (16.09.2004)

PCT

(10) International Publication Number
WO 2004/078230 A3

(51) International Patent Classification⁷: **A62B 7/10**,
18/02, 18/08, 23/02

(21) International Application Number:
PCT/US2004/006244

(22) International Filing Date: 26 February 2004 (26.02.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/451,113 28 February 2003 (28.02.2003) US
10/786,525 25 February 2004 (25.02.2004) US

(71) Applicant (for all designated States except US): **SUN-RISE MEDICAL HHG INC.** [US/US]; 7477 East Dry Creek Parkway, Longmont, CO 80502 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **JONES, Allan, R., Jr.** [US/US]; R.D.#1 Box 330, Derry, PA 15627 (US). **MACMILLAN, Nicholas, J.** [US/US]; 106 Pinehurst Lane, Greensburg, PA 15601 (US). **BIRCHLER, Terry, M.** [US/US]; 1688 Harrison Pond Drive, New Albany, OH 43504 (US).

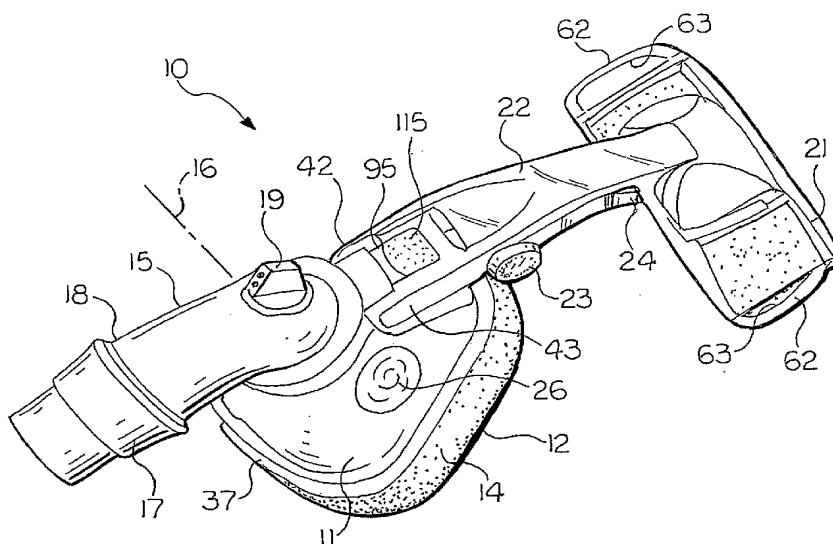
(74) Agent: **TODD, Oliver, E., Jr.**; MacMillan, Sobanski & Todd, LLC, One Maritime Plaza, 4th floor, 720 Water Street, Toledo, OH 43604 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: METHOD FOR SECURING A NASAL MASK



(57) Abstract: A nasal mask for applying pressurized gas to a user's respiratory system. The mask includes an inflatable seal which is at least partially filled with a soft open cell foam. The seal includes a manual pump and a pressure release valve for inflating and deflating the seal. The mask includes an brow bar which is connected through a bridge to the mask body. The bridge can be adjusted to position the brow bar against the user's forehead for supporting an upper portion of the mask. Headgear for attaching the mask to the user is attached to the brow bar and is looped over a prong at a lower portion of the mask for securing the lower portion of the mask to the user. The mask can be easily removed from the patient while leaving the headgear and brow bar attached to the user.

WO 2004/078230 A3



Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(88) Date of publication of the international search report:

1 December 2005

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/06244

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A62B 7/10, 18/02, 18/08, 23/02
US CL : 128/205.25, 206.18, 206.27, 207.11, 207.13

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 128/205.25, 206.18, 206.27, 207.11, 207.13

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
NONE

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
NONE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 958 841 A2 (GENGER ET AL.) 24 NOVEMBER 1999, SEE FIGS. 1-3.	1-3, 14
---		-----
Y		4-13, 15-18

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance
"E" earlier application or patent published on or after the international filing date
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
"O" document referring to an oral disclosure, use, exhibition or other means
"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"&" document member of the same patent family

Date of the actual completion of the international search

19 March 2005 (19.03.2005)

Date of mailing of the international search report

30 SEP 2005

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Facsimile No. (703) 305-3230

Authorized officer

AARON J. LEWIS *Diane Smith*
Telephone No. (571) 727-3700